

# Computer Programming

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Session: Course Project

# Course Projects

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- **The course project is a chance for you to apply your programming knowledge to solve a larger problem by developing programs to solve the problem**
  - **A taste of professional Software Development activity**

# Projects ...

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- **Open ended Projects**
- **What is to be done is not necessarily well defined**
- **Team work will be most important**
- **Efforts MUST be made by each individual member**

# Two stage process

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- **Stage 1**
  - **Problem definition**
  - **Analysis and design of the algorithms, sample code**
  - **SRS document, including draft User Manual**
- **Stage 2**
  - **Complete implementation, final documentation**

# You will learn

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- **Basic principles of project management**
- **Professional programming style**
- **To work together in groups, towards a common goal**
- **To discuss, design, document, review**
- **To take decisions, to meet deadlines**

# Project teams

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- A lab-batch will divide itself into multiple teams
  - A team should ordinarily have 3 students, at most 4
  - Each team to elect a team leader
- Regular meetings and discussions amongst members of a team
  - Lab attendance is COMPULSORY
  - At least one additional meeting per week for each team

# Project Diary

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- **Each student will maintain a project diary**
  - **Daily entries, format will be notified**
- **Consolidated entries to be uploaded every week**
  - **Each team will sum up the number of person hours spent by each member on each of the subheads during the week**

# Details to be recorded in the diary

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- Time spent for the project and specific work done
- Discussions (names of participants, nature of discussion, decisions taken)
- Design: Data/file/algorithm/function/program
- Programming
- Testing/Documentation/Report writing
- Logistics (maintaining records of meetings and decisions, uploading files, CVS work, etc.)
- Miscellaneous



# Project evaluation

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- **30 Marks, two stage evaluation**
  - **15 marks for each stage**
- **In each stage**
  - **10 marks for team report**
  - **5 marks for individual work**

# Self evaluation and peer review

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- Perhaps never attempted by any of you earlier
- Award Marks out of 5 to yourself, at each of the two stages
  - Based on the quantitative and qualitative contribution
  - Norms will be defined.
- The entire batch (all teams within a batch) will review these marks in a formal meeting

# Supervisory check

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- **Viva will be conducted for some selected student(s)**
- **Marks will be uniformly deducted for every student of the entire batch if any serious discrepancy is noticed in effort/marks is noticed during viva**

# Project schedule

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- **Team formation to be done immediately**
  - **Must be completed by 1 October midnight**
- **A list of project topics, with brief description will be uploaded on 6 October**
- **Project ideas with brief descriptions may also be submitted by team leaders till midnight of 7 October**
- **Choice of project topic must be finalized by midnight of 7 October**

# Project evaluation

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- **First stage due on 19 October**
- **Final stage due on 29 November (after end-sem)**
- **Project evaluation on 30/31 November**